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MAY

UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL ADJUSTMENT ADMINISTRATION

WESTERN DIVISION

NEW MEXICO HANDBOOK

Agricultural Conservation Program

PURPOSES OF THE PROGRAM

1. To protect and restore the soil resources of the Nation by assisting farmers to plant soil-building crops and carry out soilbuilding practices.

2. To raise farm income by bringing supplies of major crops in line with demand and by offering payments to farmers for cooperat-

ing in bringing about better conditions for agriculture.

3. To stabilize and maintain adequate food supplies for consumers.

PART I-1940 AGRICULTURAL CONSERVATION **PROGRAM**

HOW THE PROGRAM WORKS

Payments may be earned by planting within farm acreage allotments and by carrying out soil-building and soil-conserving practices.

The State is divided into A and B areas. The A area consists of Colfax, Curry, De Baca, Guadalupe, Harding, Lea, Lincoln, Mora, Quay, Roosevelt, San Miguel, Torrance, and Union Counties; that portion of Socorro County east of the range line between R. 5 E. and 6 E.; that portion of Bernalillo County east of the range line between R. 4 E. and 5 E.; and that portion of Santa Fe County south of the township line between T. 12 N. and T. 13 N. The B area consists of the remaining area of the State.

A wind-erosion farm is a farm in Colfax, Curry, De Baca, Guadalupe, Harding, Lincoln, Mora, Quay, Roosevelt, San Miguel, Torrance, or Union Counties owned or leased by a conservation district, an association determined by the State committee to have been organized for conservation purposes, or a State agency authorized by law to own or lease land for conservation or erosion-control purposes. The provisions relating to payments and deductions are different for wind-erosion farms. These provisions may be obtained from the county committee.

COTTON

A cotton acreage allotment is determined for each farm on which cotton has been planted in at least 1 year since 1936, and a small reserve is available for determining allotments for farms on which

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cotton will be produced in 1940 for the first time since 1936. The allotments for all farms within a county are based upon a fixed percentage of each farm's tilled acreage (limited, in irrigation areas, to the acreage for which an adequate supply of water has been developed for the normal production of cotton), excluding the normal wheat acreage. There are special provisions relating to minimum allotments and adjusments in the case of small farms. A normal vield is also determined for each farm having a cotton acreage

Payment will be computed at the rate of 1.6 cents per pound times the normal yield for each acre in the cotton allotment. If the acreage planted to cotton is in excess of the allotment, a deduction will be made at the rate of 4.0 cents per pound times the farm's normal yield for each acre in excess of the allotment, unless it is determined that the farm was knowingly overplanted, in which case no payment may be made under the program. The approximate amount of the cotton payment will be shown on Form WR-406B for farms in area B and on WR-406A for farms in area A.

Acreage planted to cotton means the acreage of land seeded to cotton the staple of which is normally less than 11/2 inches in length and which reaches the stage of growth at which bolls are first formed.

WHEAT

A wheat acreage allotment and normal yield is determined by the county committee in cooperation with community committees for each

farm on which wheat is grown.

Payment and deduction on wheat-allotment farms.-Payment will be computed at the rate of 9 cents per bushel times the normal yield for the farm for each acre in the wheat acreage allotment. The approximate amount of the wheat payment will be shown on WR-406B for farms in area B and on WR-406A for farms in area A.

A deduction will be made on a wheat-allotment farm at the rate of 50 cents per bushel times the normal yield for each acre planted

to wheat in excess of the farm's wheat acreage allotment.

Nonwheat-allotment farm.—A farm may be considered to be a nonwheat-allotment farm if the persons having an interest in the wheat so elect. A farm for which a wheat acreage allotment was not determined is considered to be a nonwheat-allotment farm. wind-erosion farm is considered a nonwheat-allotment farm.

wheat payment will be made on a nonwheat-allotment farm.

On a nonwheat-allotment farm the deduction will be 50 cents per bushel times the normal yield for each acre of wheat harvested for grain or for any other purpose after reaching maturity in excess of the wheat acreage allotment or 10 acres, whichever is the larger, in area A, and in excess of the usual acreage of wheat determined by the county committee for the farm or 10 acres, whichever is the larger,

Acreage planted to wheat means any acreage of land (1) devoted to seeded wheat and (2) any acreage of volunteer wheat which is harvested or which is not disposed of prior to May 1, 1940, by tillage

methods approved by the county committee.

TOTAL SOIL-DEPLETING ALLOTMENT

A total soil-depleting allotment will be determined for each farm in area A and each farm for which a cotton or wheat acreage allotment is determined in area B. A farm productivity index will be de-

termined for each farm in area A.

Payments and deductions on general-allotment farms.—In area A, a payment of \$1.10 per acre, adjusted for productivity, will be computed for each acre in the total soil-depleting acreage allotment in excess of the sum of (1) the cotton and wheat acreage allotments with respect to which payments are computed for the farm and (2) the acreage of sugar beets planted for harvest in 1940 for the extraction of sugar. The approximate amount of this payment will be shown on WR-406A.

In area A, on general-allotment farms, a deduction of \$8 per acre, adjusted for productivity, will be made for soil-depleting acreage in excess of the sum of the total soil-depleting acreage allotment for the farm and any excess acreages of cotton and wheat with respect to

which deductions are computed.

Payments and deductions on nongeneral-allotment farms.—A farm in area A for which a total soil-depleting acreage allotment (excluding the cotton acreage allotment) of 20 acres or less is determined will be considered as a nongeneral-allotment farm if the persons having an interest in the general soil-depleting crops on the farm so elect on WR-406A.

No payment will be made with respect to general crops on nongeneral-allotment farms. However, the soil-building allowance is larger

on these farms.

On nongeneral-allotment farms in area A a deduction of \$8 per acre, adjusted for productivity, will be made for soil-depleting acreage in excess of the sum of (1) 20 acres, (2) the cotton acreage allotment determined for the farm, and (3) any excess acreages of cotton and

wheat with respect to which deductions are computed.

Deduction for excess soil-depleting acreage in area B.—In area B, on farms for which a total soil-depleting acreage allotment is determined, a deduction will be made at the rate of \$5 for each acre classified as soil-depleting in excess of the larger of (1) the sum of the total soil-depleting acreage allotment and any excess acreages of cotton and wheat with respect to which deductions are computed or (2) 20 acres plus the acreage on which cotton is planted.

RESTORATION LAND

Restoration land is land in Colfax, Curry, De Baca, Guadalupe, Harding, Lincoln, Mora, Quay, Roosevelt, San Miguel, Torrance, and Union Counties, and those portions of Socorro, Bernalillo, and Santa Fe Counties included in area A, which has been cropped at least once since January 1, 1930, and which is designated by the county committee as not suited for cultivation and which should be restored to a permanent vegetative cover.

A payment of 15 cents per acre will be computed for each acre of restoration land designated for the farm. This payment will be made to the person who is the owner of the land as of June 30, 1940,

unless the land is rented for cash, in which case the payment will be

made to the cash tenant as of that date.

A deduction of \$3 per acre will be made for restoration land which is plowed or tilled in 1940 for any purpose other than tillage practices to protect the land from wind erosion or to prepare a seed bed for an approved nondepleting cover crop or permanent grass mixture.

MISCELLANEOUS DEDUCTIONS

A deduction will be made at the rate of 25 cents per acre for each time wind-erosion control methods recommended by the county committee are not carried out by the date specified on land in Colfax, Curry, De Baca, Guadalupe, Harding, Lincoln, Mora, Quay, Roosevelt, San Miguel, Torrance, or Union Counties, or those portions of Socorro, Bernalillo, and Santa Fe Counties included in area A.

A deduction of \$3 per acre will be made for native sod or any other land on which a permanent vegetative cover has been established, which is broken out in Colfax, Curry, De Baca, Guadalupe, Harding, Lincoln, Mora, Quay, Roosevelt, San Miguel, Torrance, or Union Counties, or those portions of Socorro, Bernalillo, and Santa Fe Counties included in area A. If the acreage is broken out with the approval of the county committee and at least an equal acreage of cropland other than restoration land is restored to permanent vegetative cover, the deduction will not apply.

SOIL-BUILDING ALLOWANCE

The maximum amount that may be earned on a farm by carrying out soil-building practices is the sum of the following items:

(1) 55 cents per acre of cropland in excess of the total soil-depleting acreage allotment for farms in area A.

(2) \$2 per acre of commercial orchards and perennial vegetables on the farm

January 1, 1940 (excluding nonbearing orchards and vineyards).

(3) 5 cents per acre of noncrop open pasture land, provided that the amount computed under this item shall not be less than 10 cents times the number of such acres or 640 acres, whichever is smaller.

(4) 70 cents per acre of cropland in area B in excess of the sum of (1) the cotton allotment and wheat allotment with respect to which payment is computed and (2) the acreage of sugar beets planted for harvest in 1940 for the

extraction of sugar.

(5) \$1.10 per acre, adjusted for productivity, on nongeneral allotment farms in area A, for each acre in the total soil-depleting acreage allotment in excess of the sum of (1) the cotton allotment and wheat acreage allotment with respect to which a payment is computed and (2) the acreage of sugar beets planted for harvest in 1940 for the extraction of sugar.

(6) 45 cents per acre for each acre of restoration land.

For any farm where the sum of the payments computed for cotton, wheat, the total soil-depleting allotment, restoration land, and under items 1 through 6 above, is less than \$20, the soil-building allowance shall be increased by the amount of the difference. In addition, a payment of \$7.50 per acre for planting forest trees will be made, not to exceed a total of \$30 for the farm.

SOIL-BUILDING PRACTICES

In determining the acceptability of the methods used in carrying out soil-building practices, the farmer should be guided by the specifications contained herein and any additional specifications issued by the State committee as are needed in the interest of soil conservation. This applies particularly to rates, dates, and methods of seeding, cultural practices, adaptability of soil-conserving crops, trees and shrubs, methods of weed control, etc., used in connection with soil-building practices.

The farmer must make sure that the seed used is adapted to the community, free from noxious-weed and relatively free from other weed seed, and is seeded in sufficient quantity to meet at least the minimum seeding requirements in good viable seed. The farmer will be expected to cooperate with governmental insect-control agencies in the area where the farm is located, whenever an organized insect-

control campaign is operated in the area.

The approximate maximum amount that may be earned, by use of the soil-building practices in this handbook, on any farm in New Mexico, is the amount shown on the farm plan and estimate sheet (WR-406A or WR-406B). If all or part of the labor, seed, or materials is furnished by any governmental agency, no credit or only partial credit will be given for the practice. The county committee will furnish further detailed information.

The farmer should plan his operations for the year, considering the very best farm plan for that farm, and then determine whether or not his planned soil-building practices for the year will bring

about the greatest possible amount of soil conservation.

A combination of soil-building practices on the same land will be permitted only with the approval of the State committee.

The 1940 crop year for carrying out soil-building practices will be from January 1, 1940, through November 30, 1940.

Application of Materials

Practice (1) (i)—Application of phosphate.—\$1.50 for each 300 pounds of 16 percent superphosphate or for its equivalent of 48 pounds of available P_2O_5 in other forms of fertilizer (107 pounds of treble superphosphate, 45 percent phosphate), applied to, or in connection with the seeding of any of, the perennial or biennial legumes, or perennial grasses, or annual ryegrass, or green-manure crops in orchards, in all counties of the State. Rock phosphate and basic slag will not qualify under this practice. No credit will be given when fertilizers are used in connection with soil-depleting crops. Operators should save tags or purchase slips as supporting evidence of performance.

Seeding Practices

Practice (6)—Alfalfa.—\$1.50 per acre for each acre seeded to alfalfa on crop-

land or in orchards.

Practice (7)—Seeding permanent grasses.—\$3 for each acre seeded in a good workmanlike manner approved by the county committee to a full seeding of grama grass in all counties, or western wheatgrass, slender wheatgrass, or crested wheatgrass, or mixtures of these grasses, in the counties of Bernalillo, Colfax, Curry, De Baca, Guadalupe, Harding, McKinley, Mora, Quay, Rio Arriba, Roosevelt, Sandoval, San Juan, San Miguel, Santa Fe, Taos, Torrance, Union, and Valencia, or above the 5,000-foot elevation in the remainder of the State.

Practice (8)—Annual ryegrass, annual sweetclover, biennial legumes, perennial legumes, perennial grasses, or mixtures.—75 cents per acre for each acre seeded, in a good workmanlike manner approved by the county committee, to annual ryegrass, annual sweetclover, bluegrass, bromegrass, perennial ryegrass, velvetgrass, mesquite grass, buffalo grass, white clover, Ladino clover, strawberry clover, biennial sweetclover, orchard grass, meadow fescues, little blue stem, big blue stem, or mixtures of any of the above legumes and grasses. Red clover may be seeded on irrigated land only.

Practice (9) (a)—Seeding winter legumes.—\$1.50 for each acre of hairy vetch, Austrian winter peas, or sour clover, seeded on cropland in the fall or winter.

Practice (12)—Timothy or redtop.—\$1.50 for each 4 acres seeded to timothy or redtop or a mixture consisting solely of timothy and redtop.

Pasture Improvement

Practice (13)—Reseeding depleted pastures.—\$1.50 for each 10 pounds of seed used in reseeding depleted pastures or restoration land with good seed of pasture grasses or legumes recommended by the New Mexico Agricultural Experiment

Station and approved by the State committee.

Practice (16)—Construction of reservoirs and dams.—\$1.50 for each 10 cubic yards of material moved in making a fill or excavation, or \$1.50 for each 7 cubic feet of concrete or rubble masonry, for constructing reservoirs or dams. Same specifications as under the range program in connection with practices (g) and (h) will be applicable.

Soil Improvement

Practice (17)—Green-manure and cover crops.—

(A) \$1.50 for each acre of annual or biennial legumes (except pinto beans and lespedeza), small grains other than wheat (seeded in the fall of 1939), or mixtures of these crops, of which a good stand and a good growth are

turned under on irrigated cropland or in orchards.

(B) 75 cents for each acre of winter rye or small grains (except wheat) seeded in the spring of 1940, sweet sorghums, Sudan grass, or millet of which a good stand and good growth are turned under as green manure or left as a cover crop and not harvested for grain, seed, hay, or forage, or pastured. If the crop is turned under on land subject to erosion it must be followed by a winter cover crop.

Green-manure crops and cover crops shall not include any crop for which credit is given in 1940 under any other practice or any crop from which seed

is harvested by mechanical means.

The county committee must be notified and must give its approval before a

green-manure crop is turned under.

Practice (18)—Summer legumes.—\$1.50 for each 4 acres of summer legumes, including soy beans not harvested for grain, interplanted or grown in combination with soil-depleting crops on irrigated cropland in the counties of Chaves, Dona Ana, and Eddy. The forage shall not be harvested or the seed removed by mechanical means. A good stand and a good growth must be obtained.

Erosion Control

Practice (20)—Terracing.—\$1.50 for each 200 feet of standard terrace constructed. Prior approval of the county committee must be secured. Terraces shall be from 20 to 40 feet wide and from 12 to 24 inches high and spaced at intervals not in excess of 3 feet vertical distance. Terraces must be constructed so as to effectively control soil erosion and conserve moisture in the area involved.

The terrace outlets must be sufficiently protected to prevent erosion.

Practice (22)—Water spreading.—\$1.50 for each 300 linear feet of ditching constructed for the diversion and spreading of flood water or well water on cropland, restoration land, pasture land, or hay land. Ditches of less than 300 feet in length will not qualify. The ditches must be of such design as to produce nonerosive velocities of water, the grade not exceeding 5 inches per hundred feet of length, with a cross-section measurement of not less than 4 square feet. The ditch must have ample capacity to carry the diverted water with an adequate outlet at the ditch end. If openings are made along the ditch they must be protected by sod, riprap, or woven-wire spreaders.

Practice (23)—Riprapping the banks along active streams.—\$1.50 for each

Practice (23)—Riprapping the banks along active streams.—\$1.50 for each cubic yard of rock riprap constructed along active streams for the control of erosion of adjacent farm land. Prior approval of the county committee must be secured before construction is started, at which time approved instructions

will be furnished to each cooperator whose practice is approved.

Practice (26)—Contour furrowing noncropland.—\$1.50 for each 4 acres of contour listing, deep or shallow subsoiling, or contour furrowing of noncrop land. Furrows must be not less than 6 feet nor more than 25 feet apart. Furrows constructed with plow or lister must be not less than 8 inches in width and 4 inches in depth. Furrows constructed with subsoiling equipment must open a

furrow not less than 6 inches wide and 6 inches deep. The acreage of this practice shall be computed on the basis of the area so handled, each furrow or strip being considered to occupy an area not in excess of ½ rod in width. Performance shall not be approved where payment has been made on the same area

for a similar practice under a previous program.

Practice (27)-Leaving stalks of sorghum as a protection against wind erosion.—\$1.50 for each 4 acres of cropland in Colfax, Curry, De Baca, Guadalupe, Harding, Lincoln, Mora, Quay, Roosevelt, San Miguel, Torrance, or Union Counties, or those portions of Socorro, Bernalillo, and Santa Fe Counties included in area A, on which stalks of sorghums, including broomcorn and Sudan grass, seeded broadcast or in rows not more than 42 inches apart, are left on the land as a protection against wind erosion. The county committee must determine that the stalks are at least 12 inches high and that there is sufficient growth to adequately protect the land from wind erosion. The operator's farming plan must provide that such cover will be left on the land until the spring of 1941 in order to qualify for payment under this practice.

Practice (28)—Protecting restoration land.—\$1.50 for protecting each 4 acres of land properly designated as restoration land in 1938 or 1939 on which the county committee finds that no soil-building practices are needed in 1940 to expedite the establishment of a permanent vegetative cover. The county committee must approve this practice and certify that additional soil-building practices are not needed on such restoration tract. Such certification must be made

prior to May 1, 1940.

Practice (30)—Stripcropping.—\$1,50 for each 4 acres of nonirrigated cropland

striperopped in accordance with the following specifications:

(1) 2 or more strips of beans protected by strips of close-grown crops or strips of intertilled sorghums (including broomcorn and Sudan grass). Strips must not be in excess of 28 feet nor less than 12 feet in width.

(2) 2 or more strips of fallow protected by strips of close-grown crops or strips of intertilled sorghums (including broomcorn and Sudan grass). Strips must not be in excess of 8 rods nor less than 2 rods in width. Weed or other volunteer growth must be controlled on the fallow strips from June 1, 1940, until September 15, 1940, or until such strips are seeded to a fall-seeded crop.

(3) The operator's farming plan must provide that the stalks or stubble of the protecting crop will be left on the ground until the spring of 1941 and, in the case of an intertilled protecting crop, must be at least 12 inches high.

(4) There must be a minimum of 4 strips if the area is given credit under

this practice.

(5) Alternate strips must be approximately the same width.

Practice (31)—Protecting summer fallow.—\$1.50 for each 4 acres of nonirrigated cropland on which summer fallow is protected from wind and water. erosion by contour listing, pit cultivation, or incorporating stubble and straw into the surface soil. The first tillage operation must be performed not later than June 1 and the land must be clean-cultivated from June 1, 1940, until September 15, 1940, or until such acreage is seeded to a fall-seeded crop.

The base guide lines used in contour furrowing shall not vary from the true contour by more than $\frac{1}{10}$ (one-tenth) of 1 percent and shall be spaced at inter-

vals not in excess of 3 feet vertical distance.

Pit cultivation must leave pits at least 4 inches deep below the ground surface

and such pits must cover at least 25 percent of the ground surface.

All tillage implements used for incorporating the stubble or straw into the surface soil shall leave the surface rough and leave the stubble or straw on or near the surface.

No credit will be given for this practice when carried out on light sandy soils or on soils in any area where destruction of vegetative cover results in the land

becoming subject to serious wind erosion.

Practice (32)—Contour farming intertilled crops.—\$1.50 for each 8 acres of nonirrigated cropland on which all the operations of preparing the seed bed, of seeding or planting, and of cultivating intertilled row crops are performed parallel to a contour line. The base guide lines must not vary more than $\frac{1}{10}$ (one-tenth) of 1 percent from the true contour and must be spaced at intervals not in excess of 3 feet vertical distance.

This practice must be carried out on an entire field if such field is to qualify

for payment.

This practice will not be approved for fields which contain gullies unless terraces are constructed over the gully area.

This practice is not applicable on fields with an average slope of less than

1/2 (one-half) of 1 percent.

Practice (33)—Contour listing.—\$1.50 for each 6 acres of nonirrigated cropland contour listed, except where such listing is a part of a summer-fallow or seeding operation.

Furrows must be not more than 42 inches apart, not less than 8 inches wide, nor less than 4 inches in depth from the ground surface. The base guide lines must not deviate more than $\frac{1}{10}$ (one-tenth) of 1 percent from the true contour and must be spaced at intervals not in excess of 3 feet vertical distance.

This practice may be carried out for credit on restoration land with prior

approval of the county committee.

Practice (34)—Pit cultivation.—\$1.50 for each 8 acres of nonirrigated cropland pit-cultivated as a protection against wind erosion in the counties of Union, Harding, Quay, Curry, and Roosevelt. No credit will be given for this practice when carried out as a part of a summer-fallow or seeding operation.

Pit cultivation to be approved for credit under this practice must be solid cultivation with an implement leaving dams not more than 1 rod apart in furrows at least 4 inches in depth below the original ground level. Pits shall cover at

least 25 percent of the ground surface.

This practice will not be approved on fields with a slope in excess of 2 percent

unless performed approximately on the contour.

Practice (35)—Contour seeding small-grain crops.—\$1.50 for each 10 acres of cropland seeded to small grains on the contour. This practice cannot be carried out for payment on fields with an average slope of less than ½ (one-half) of 1 percent.

This practice must be carried out on an entire field if the field is to qualify for payment. The base guide lines must not vary from the true contour by more than $\frac{1}{10}$ (one-tenth) of 1 percent and must be spaced at intervals not in

excess of 3 feet vertical distance.

Forestry

Practice (38)—Cultivating and protecting trees.—\$3 for each acre of forest trees that were planted between July 1, 1936, and July 1, 1940, which are cultivated, protected, and maintained, by replanting if necessary, to maintain a stand of not less than 200 living trees per acre. Livestock must be kept out of the area and there must be sufficient cultivation to keep down weed growth. The measurement on single-row plantings will be taken ½ rod on each side of the row. In block plantings, the measurement will be taken ½ rod outside of the last row of plantings.

Practice (40)—Planting trees.—\$7.50 per acre for planting forest trees, including shrubs beneficial to wildlife, provided such trees are protected from fire and grazing and cultivated in accordance with good tree-culture and wildlife-management practice. Prior approval of the county committee must be obtained and detailed, approved instructions as to the time of planting, methods of planting, and varieties that may be used will be furnished to each individual whose

proposed practice meets with their approval.

Other Practices

Practice (43)—Controlling noxious weeds.—\$7.50 for each acre of cropland, or chard land, or pasture land in organized weed-control areas where seriously infested plots of perennial noxious weeds are controlled by clean tillage or by the use of chemicals.

Prior approval of the State committee for proposed areas must be obtained prior

to April 1.

Designated weeds that may be controlled for credit under this practice in New Mexico are bindweed, blue weed, Canadian thistle, silver leaf poverty weed, Russian knapweed, nutgrass, and white top (Lapidium Draba).

Operators must secure prior approval before instituting this practice and detailed instructions for carrying out weed-control will be furnished by the county

committee at that time.

Practice (47)—Subsoiling.—\$1.50 for each 4 acres of cropland that is subsoiled to a depth of not less than 10 inches. In determining the acreage of this practice for credit each furrow will be considered to occupy an area not in excess of ½ rod in width.

SOIL-DEPLETING ACREAGE

Any acreage of land devoted during the 1940 crop year to one or more of the following crops or uses will be considered as soil-depleting acreage:

Corn planted for any purpose, except sweet corn or pop corn grown in a home garden for use on the farm.

Cotton which reaches the stage of growth at which bolls are first formed.

Grain sorghums, sugar beets, broomcorn, mangels, or cowbeets planted for any purpose.

Peanuts harvested for nuts or dug for hay.

Potatoes or annual truck and vegetable crops planted for any purpose, except when grown in a home garden for use on the farm.

Commercial bulbs and flowers, commercial mustard, cultivated sunflowers,

safflower, or hemp harvested for any purpose.

Field beans planted for any purpose or peas planted for canning or freezing or use as dried peas, except when grown in a home garden for use on the farm or when incorporated into the soil as green manure.

Flax planted for any purpose, except when used as a nurse crop for biennial or perennial legumes or perennial grasses which are seeded in a workmanlike

manner.

Wheat planted or regarded as planted for any purpose on a wheat-allotment

farm.

Wheat on a nonwheat-allotment farm, oats, barley, rye, emmer, speltz, or mixtures of these crops, harvested for hay, except when such crops are used as nurse crops for legumes or perennial grasses which are seeded in a workmanlike manner and the nurse crop is cut green for hay.

Buckwheat, Sudan grass, or millet harvested for grain or seed.

Sweet sorghums harvested for grain, seed, or sirup.

Land summer-fallowed if not protected from wind and water erosion by pit cultivation, contour listing, strip cropping, incorporating small grain stubble, or straw or by performing all tillage operations with implements which will create and maintain a rough, cloddy, or trashy surface.

PAYMENT PROVISIONS

Division of special crop and total soil-depleting allotment payments.—In general, the crop-allotment payments and deductions will be divided between landlords, tenants, and sharecroppers as the crop is divided. In cases where two or more separately owned tracts of land comprise a farm, the share of each person in the payment or deduction will be that indicated on ACP-95 if all interested persons agree.

Division of soil-building payments.—The payments earned in connection with the soil-building practices will be paid to the landlord, tenant, or sharecropper who carried out the soil-building practices.

Deductions from other farms.—If a person complies on one farm and has an interest in any other farm which is not in compliance to the extent that deductions exceed the payments, the payments due him on the farm in compliance will be reduced by his share of the deductions carried over from the other farm.

Increase in small payments.—If the total payment computed for any person is less than \$200 the payment will be increased by an amount fixed by the law. Information as to the exact amount of

the increase can be obtained from the county committee.

Payments limited to \$10,000.—Combined range- and agricultural-conservation payments to any individual, partnership, or estate are limited by the law to \$10,000 in a State; a corporation or association is, by the law, limited to \$10,000 in the United States.

Deductions for association expenses.—The estimated administrative expenses of the county agricultural conservation association shall be deducted pro rata from the payments computed for all the

farms and ranches in the county.

Materials furnished as grants of aid.—Wherever superphosphate is furnished by the Agricultural Adjustment Administration as a grant of aid to be used in carrying out approved soil-building practices, a deduction will be made from the payment for the farm in the amount of the average cost of the material to the Agricultural Adjustment Administration. Any material secured as a grant of aid must be used in accordance with the purposes for which such material was furnished. If the county committee finds that the material has not been used for the purpose for which it was furnished, a deduction at twice the rate of the cost of the material will be made.

Defeating purposes of the program.—Congress has authorized payments only to persons whose cooperation results in net contributions to the program. Accordingly, payment will be withheld from any person who adopts any practice which tends to defeat or offset

the purposes of the program.

Idle farms.—The only payments which will be made with respect to farms which are not operated in 1940 are payments for carrying out soil-building practices and in connection with restoration land.

Payments made or computed without regard to claims.—Any payment or share of payment will be made without regard to questions of title under State law and without regard to any claim or lien against any crop, or proceeds thereof, in favor of the owner or any other creditor, except as stated in the paragraph on assignments and indebtedness to the United States which is subject to set-off.

Availability of funds.—All payments provided for in this handbook are subject to the limits determined by appropriations which Congress may provide. As an adjustment for participation, the rates of payment and deduction with respect to any commodity or item of payment may be increased or decreased by as much as 10 percent.

APPLICATION PROVISIONS

Eligibility for payment.—An application for payment may be made by any person for whom a share in the payment with respect to a farm may be computed and who at the time of harvest is entitled to share in any of the crops grown on the farm under a lease or operating agreement, or who is owner or cash tenant of a farm on June 30, 1940, on which restoration land is designated or who participates in carrying out approved soil-building practices on the farm.

Time of filing application.—Payments will be made only upon applications submitted through the county office on or before March 31, 1941, and only to those persons who furnish required information and file prescribed forms within the respective time limits therefor.

Other farms in the county.—A person must make application for payment with respect to all farms in the county which he operates or rents to other persons.

MISCELLANEOUS PROVISIONS

Assignments.—Any person who may be entitled to a payment in connection with the 1940 program may assign his interest in such pay-

ment as security for cash loaned or advances made for the purpose of financing the making of a crop in 1940, or for money or materials advanced or labor performed in carrying out range-building practices. No assignment will be recognized unless the assignment is made on ACP-69 and in accordance with instructions contained in ACP-70.

Appeals.—Any person has 15 days following his notice of any action of the county committee to file a written appeal asking for reconsideration. Any person having appealed to the county committee who is still dissatisfied may, within 15 days following his notice of the reconsideration, appeal to the State committee, whose action is

reviewable by the Regional Director.

Applicability.—The provisions of the 1940 program are not applicable to public domain, including land owned by the United States and administered under the Taylor Grazing Act or by the Forest Service of the United States Department of Agriculture and other land in which the beneficial ownership is in the United States.

ADDITIONAL INFORMATION

Complete information may be obtained from the county office of the agricultural conservation association regarding allotments, payments, appeals, detailed specifications for soil-building practices, and other details of the program.

PART II—1940 RANGE CONSERVATION PROGRAM

HOW THE PROGRAM WORKS

Payments may be earned by carrying out range-building practices listed below, from January 1, 1940, through November 30, 1940, which are approved by the county committee for the ranching unit prior to their institution. Detailed specifications will be given to the operator for those practices which he selects for which further detailed specifications are necessary. The amount of payment which may be earned cannot exceed the range-building allowance.

The operator shall assume all responsibility for the acquiring of necessary permits, for the violation of any established water rights, or for other damage to property as a result of construction under the

provisions of the range-conservation program.

RANGE-BUILDING PRACTICES

Seeding Practices

Practice (a)—Natural reseeding by deferred grazing.—75 percent of the rangebuilding allowance, excluding that part which is computed for mountain meadowland, may be earned by withholding 25 percent of the range land from grazing from the start of forage growth to seed maturity (such period being not less than 90 consecutive days beginning upon the date determined by the State committee and announced for their respective counties by the county committees not less than 15 days prior to the beginning of such period) and by performing supplemental practices prescribed by the county committee for which payment will not etherwise be made. If less than 25 percent of the range land in the ranching unit is deferred, a proportionate payment may be earned. In any event, the payment for deferred grazing shall not exceed the value of supplemental practices performed which are designated by the county committee in accordance with instructions issued by the State committee with the approval of the Regional Director. On ranching units on which cattle or horses are grazed, the deferred area must be fenced and the fence maintained sufficiently to prevent the entry of livestock. On

ranching units used exclusively for grazing sheep or goats, the entry of livestock on the nongrazing acreage must be prevented by herding or other specified methods. The remaining range land on the ranching unit must not be grazed to such an extent as will decrease the stand of grass or injure the forage, tree growth, or watershed. The practice of deferred grazing shall not be applicable on range land which normally is not used for grazing. The ranch operator must file Form WR-415 with the county committee designating the area to be deferred prior to the initiation of the practice.

The deferred grazing unit may be used for grazing at the close of the deferred grazing period, but hay shall not be cut nor seed harvested therefrom in 1940.

Practice (b)—Artificial reseeding.—20 cents per pound of seed sown, but not in excess of \$2 per acre, provided that timothy, bulbous bluegrass (*Poa bulbosa*), or sweetclovers may be seeded only in mixtures constituted of 60 percent or less of these species.

For reseeding depleted range land, including mountain meadowland, with good seed of adapted varieties of range grasses, legumes, or forage shrubs recommended for the locality by the New Mexico Experiment Station and approved by the State committee, provided good seed of high germination and purity, free from weed seeds, shall be used. The time of seeding and species to be seeded shall be approved for each locality by the county committee prior to the time the practice is carried out. This practice shall not be approved unless operator's management plan provides that the reseeded area will be protected from grazing during the critical period in plant growth following seeding.

The operator must present conclusive evidence of the amount, kind, and quality

of grass, legume, or shrub seed used in performance under this practice.

Erosion and Run-off Control

All soil-erosion and water-conservation measures developed for payment shall be solely for the purpose of conserving moisture and retarding soil erosion on range land in order to facilitate the renovation and maintenance of adequate vegetative cover. The use of mechanical water-conservation measures shall be limited to soil types that are porous enough to satisfactorily utilize the additional moisture from the application of these measures, and to the flatter slopes or locations where the diversion can be attained without undue expense. All erosion-control measures shall be staked out by a competent person prior to institution.

Practice (d)—Contour listing, furrowing, or subsoiling.—2½ cents per 100 linear feet for listing, furrowing, or subsoiling range land, including mountain meadowland, on the tontour. Written prior approval must be secured from the

county committee, and will be based on soil types and ground cover.

Listing or furrowing shall be constructed on the contour, with lists or furrows spaced not more than 25 feet apart horizontally or 2 feet vertically and having a minimum cross-section area of not less than 32 square inches. A series of two or more operations, having an aggregate cross-sectional area of 32 square inches, may be used in lieu of a furrow. Dams or furrow breaks at intervals of not more than 100 feet shall be provided on furrows with a cross section in excess of 30 square inches to check the free movement of water along the furrow and to assure more uniform moisture distribution.

Subsoiling on range land, which includes chiseling, scarifying, or ripping, will be permitted for the purpose of checking run-off, increasing penetration, and to promote reseeding, with not less than four contours every 50 feet which

open the soil to a depth of not less than 12 inches.

On mountain meadowland, subsoiling shall be performed on the contour to a minimum depth of 4 inches with not less than 16 lists or furrows to each 50-foot strip.

Performance shall not be approved where payment has been made on the

same area under a previous program.

Practice (f) (1)—Spreader dams.—15 cents per cubic yard of material moved in the construction of earthen dams built on intermittent streams. Dams in excess of 4 feet in height shall be built to the same standards as are applicable for practice (g), Earthen tanks or reservoirs, in respect to top width, free-

board, and side slopes; in addition, they shall be supplemented with smaller diversion dams or dikes extending from either one or both ends of the dam, if necessitated by existing topography. The dikes shall be of sufficient length and

height to allow for uniform spreading of the water.

Small spreader dams or dikes may be used either individually or in combination with larger spreader dams. Spreader dams will not be necessary on small watersheds where dikes can divert the water. Dams or dikes not in excess of 4 feet in height shall have minimum side slopes of 2 to 1. The crown shall not be less than 1 foot wide. If the dikes are given a grade, the fall shall not exceed 4 inches per 100 feet of length. Sufficient openings should be made through the dikes according to topographic features, to allow for uniform spreading of diverted water. The opening shall be protected by masonry, rock riprap, or sodding.

Under no circumstances shall payment be made for performance of this practice unless the diverted water is spread over the area affected and its return to

the flood channel is retarded sufficiently to prevent further erosion.

Practice (f) (2)—Spreader terraces.—50 cents per 100 linear feet. struction of spreader terraces or diversion ditches for any purpose other than spreading of flood water will not qualify for payment. The ditch should be designed for nonerosive velocities, and the grade used should ordinarily not exceed 4 to 5 inches per 100 feet of length. Ditches shall have a cross-section measurement of not less than 5 square feet at the point of diversion and 2 square feet at the discharge end. The ditch shall have ample capacity to carry the diverted water and shall have an adequate outlet at the discharge end. If openings are made along the length of the ditch, where the density of natural sod is not sufficient to spread water without erosion, riprap or woven-wire spreader shall be used for protection.

Stock-Water Development

Any practice under water development performed for payment shall supply ample water for the number of livestock using the adjoining range during its period of grazing and shall be solely to bring about such a distribution of livestock on the range as will conserve and restore the vegetative cover thereof, but shall not be used to impound water for irrigating purposes on cropland. Existing dams may be enlarged where the project has prior approval of the State committee based on the recommendation of the county committee, which must show that the dam is properly located, its enlargement is necessary to make permanent water available, and the yardage in place as well as the approximate yardage in the proposed enlargement. All constructions shall be of a permanent nature and in accordance with approved specifications.

Any development of stock water on a ranching unit within a reasonable distance of any other watering place which already provides adequate water to livestock using the adjoining range shall not be

Practice (g)—Earthen tanks or reservoirs.—15 cents per cubic yard of material moved not in excess of 5,000 cubic yards and 10 cents per cubic yard of material moved in excess of 5,000 cubic yards in a single development, for the construction of reservoirs or earthen tanks, with spillways adequate to prevent dams from washing out, for the purpose of providing water for range livestock.

This practice shall not be approved on permanently running streams, and shall be located, when possible, to take advantage of natural spillway facilities, protection from wave action, and minimum fill requirements to achieve satisfactory reservoir capacity. Sites should not be approved in light sandy soil or in porous formation incapable of impounding water. Payment will not be made for building dams with a fill more than 12 feet in height, unless the construction and specifications therefor are approved in writing by the State committee prior to the institution.

Spillways, if not sodded or heavily grassed, shall be protected by brush mats, stone, wood, or concrete, or, upon specific approval by the county committee they may be protected by a series of two or more check dams bedded not less than 1 foot below the spillway floor and with wing walls to prevent end cutting. The end of the fill must in all cases be riprapped if it forms one side of the spillway.

The spillway of any dam shall have a minimum cross-section of 45 square feet and the county committee shall require such additional cross-section as is neces-

sary to carry the maximum flow at flood stage.

The bottom of the reservoir shall be not less than 7 feet below the floor of the spillway. The minimum freeboard (distance measured vertically between the top of the dam and the bottom of the spillway) shall be 3 feet. For dams with an upstream vertical height greater than 12 feet, the freeboard shall be at least equal to 25 percent of the height, except that a freeboard in excess of 7 feet shall not be required or be paid for in any dam.

Dam dimensions shall meet the following specifications: The top width shall be a minimum of 6 feet. Slopes shall not be steeper than 3 to 1 on the upstream face and 2 to 1 on the downstream face. Sites for all dams shall be surveyed by a competent person, who will stake off and prepare a design of the proposed dam. Prior approval by the county committee shall be based upon

such information and shall be made in writing.

Where an off-channel reservoir site or a natural storage basin is available but the drainage area does not produce adequate run-off to provide permanent stock water, a diversion channel from another drainage shall qualify for payment under this practice, provided such channel is constructed on a nonerosive grade and there is no possibility of its use for irrigation. Payment shall be made for

excavated cross-section not in excess of 3 square feet.

Where the construction of a dam is not necessary to impound water, and the topography of the land makes it possible to concentrate water in a pit or earthen tank for livestock and specifications for a dam and spillway are not applicable, payment will be made for excavating a pit or earthen tank, provided the excavation is made in a natural basin or in a relatively flat, wide drainage area. Such pit or tank shall have a depth of not less than 7 feet from the bottom to the ground level at outlet, unless test holes determine that rock, gravel, or other porous material, incapable of holding water, underlies the site, in which case the county committee may approve the development with a depth not less than 5 feet. All excavated pits shall be constructed with a slope on any side not steeper than 2 to 1 and the bottom area of not less than 100 square feet.

Practice (h)—Concrete or rubble-masonry dams.—\$6 per cubic yard of concrete or rubble-masonry construction in concrete or rubble-masonry dams in rough or broken areas (where earthen dams or reservoirs are impracticable, and where there is no possibility of using the dam for irrigation), for the purpose of

providing water for range livestock.

The dams shall be located on a firm foundation that will insure stable support for the structures under all conditions. The location shall be such as to take advantage of minimum size requirements for structures, and at the same time give a minimum reservoir depth of 5 feet. The distribution of the reservoirs constructed shall conform with the requirements for range-water distributions previously specified. Concrete used must be made in accordance with standard recommendations set forth in Farmers' Bulletin No. 1772, "Use of Concrete on the Farm," published by the United States Department of Agriculture, Washington, D. C. Mortar used for masonry dams shall be of a mix not leaner than 1 part of cement to 3 parts sand, and the rocks shall be carefully laid in place so as to form an interlocking bond. All proposed dams must be constructed at sites and in accordance with specifications approved in writing by the State committee prior to institution.

Practice (i) (1)—Wells.—\$2 per linear foot for drilling or digging wells with casing not less than 4 inches in diameter, for the purpose of providing water for range livestock, provided a windmill or power pump is installed and the water is conveyed to a tank or storage reservoir. Payment will not be made for a well

developed at any ranch headquarters.

Any well developed for payment shall supply ample water for the number of livestock using the adjoining range during the grazing period, and shall be solely for the purpose of bringing about such an improved distribution of stock on such range as will conserve and restore the vegetative cover thereof. A dry hole shall not qualify. A mechanical lifting device other than a hand pump shall be installed and be in operation at the time of inspection. An existing well may be deepened to provide an additional supply of water adequate for the number of livestock on the adjacent range; but under no circumstances shall such

performance be approved before measurements showing the depth of the existing well have been made and recorded with the county committee.

A good sound trough or pipe shall convey the water to a tank or storage reservoir, which shall be of sufficient size to assure an ample supply of good clear water for the number of livestock using the adjacent range.

Ample protection must be given to the well and watering facilities used in

connection therewith.

No payment will be made for a tank or storage reservoir constructed in connection with this practice. An artesian well shall not qualify under this practice.

Practice (i) (2)—Wells.—\$1 per linear foot for drilling wells with easing less than 4 inches in diameter, for the purpose of providing water for range livestock, provided a windmill or power pump is installed and the water is conveyed to a tank or storage reservoir. An artesian well with casing less than 4 inches in diameter will qualify for payment, provided adequate stock water is made available during the grazing season and the water is conveyed to a tank or trough. Payment will not be made for a well developed at any ranch head-quarters.

The same specifications as for a well with 4-inch casing will apply, with the exception that no payment will be made for a well other than an artesian well under this practice if casing less than 2 inches is installed. An artesian well equipped with a cutoff device, when constructed according to specifications, will be approved, but a mechanical lifting device will not be required. No payment will be made for a tank or storage reservoir constructed in connection with

this practice.

Practice (j) (1)—Development of natural watering places.—30 cents per cubic foot of excavation in soil or gravel for excavation of source, provided the minimum payment will be \$20 and the maximum payment \$100 for any single development, for developing springs or seeps for the purpose of providing water for range livestock, provided the source is protected from trampling, and at least 20 cubic feet of available water storage is provided. This practice will not be approved for payment unless the total cost of the development amounts to at least \$20.

A spring or seep shall be developed by digging out the source, and, where practical, conveying through a pipe not less than 1 inch in diameter or through a trough to a wooden, metal, or concrete tank or trough. Where the above method is impractical, another type of development which conforms with good ranching practice shall qualify. A wet-weather spring or seep shall not qualify, nor shall the repairing or enlarging of any spring or seep for which a payment

has been made under a previous program be approved for payment.

To prevent the development of a mire and the settling of the trough, waste water shall be disposed of through an overflow pipe, unless the site is so steep or rocky as to make a waste pipe unnecessary. This practice shall not be approved by the county committee where it appears that it will contribute more to the convenience of an operator than it will to the distribution of livesock on the range. A spring shall be covered and "boxed in" with either masonry, concrete, rock, sound timbers at least 1% inches in thickness when surfaced, or heavy metal not lighter than 8 gage.

Payment for exeavation or construction at the source of the spring or seep in excess of the minimum requirements for a practical development shall not be approved. All rock shall be classed for payment as gravel unless a drill is

required to excavate it.

The source of each spring or seep, including the backfilling of any excavation made for installing perforated tubing or tile, shall be adequately protected from trampling, either by a fence which will turn all classes of livestock or by rock

and a substantial covering.

Practice (j) (2)—Development of natural watering places.—50 cents per cubic foot of excavation in rock, provided the minimum payment will be \$20 and the maximum payment \$100 for any single development. This practice will not be approved for payment unless the total cost of the development is at least \$20.

The specifications for this practice shall be the same as those applicable under

practice (j)(1).

RANGE-BUILDING ALLOWANCE

The range-building allowance shall be 3 cents per acre of range land in the ranching unit plus 75 cents times the grazing capacity of the range land. However, the grazing item shall not be calculated on

more than one animal unit for each 10 acres of range land in the ranching unit, and the acreage item shall not be calculated on more than 60 acres for each animal unit of grazing capacity established for the ranching unit. The amount computed under the above items shall not be less than 10 cents times the number of such acres or 640 acres, whichever is smaller. In addition, in Rio Arriba, Colfax, and Taos Counties the range-building allowance shall include 35 cents for each acre classified as mountain meadowland in the ranching unit.

CONDITIONS OF PAYMENT

Payments under the 1940 Range Conservation Program shall be made only on those ranches with respect to which the county committee certifies that good range-management practices have been carried out during 1940 and only for such practices as are needed on the ranch to promote conservation and good range management.

Payment for range-building practices shall not exceed the rangebuilding allowance computed for the ranch and shall be made for any practice only when performed in accordance with approved specifi-

cations.

No payment will be made where one-half or more of the total cost of a practice is contributed by a State or Federal agency; if less than one-half of such cost is contributed by a State or Federal agency, pay-

ment at one-half the approved rate may be made.

All or any part of the payment for performance of range-building practices may be withheld if the applicant has employed any scheme or device that will deprive another person of a share of the payment to which he would have been entitled if the 1939 leasing arrangement had been in effect, or if any practice has been adopted which defeats the purpose of this or any previous range programs, or if the forage, tree growth, or watershed has been injured by overgrazing in 1940 on any range land under the control of the operator.

GENERAL PROVISIONS

Range program provisions which are similar to those for agricultural conservation program.—Provisions of the range program with respect to claims, assignments, time of filing applications, increase in small payments, \$10,000 limitation, deductions for administrative expenses, appeals, availability of funds, and applicability are similar to such provisions in part I of this handbook.

Establishment of grazing capacities.—The grazing capacity of each ranch for which Form WR-415 is executed, which form must be filed in the county office before May 1, 1940, will be determined by a

competent range examiner.

ADDITIONAL INFORMATION

Complete information may be obtained from the county office of the county agricultural conservation association regarding payments, appeals, range-building practices, and other details of the program.

N. E. Dodd, Director, Western Division.

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